

Psychiatric Morbidity Among Prisoners in Egypt

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Abstract: Numerous studies have shown that mental disorders can be obviously found more frequently in prisoners in comparison to normal populations. The current study aimed to assess the incidence of psychiatric morbidity among prisoners. A convenience sample of 80 institutionalized criminal prisoners. Was used A descriptive exploratory design was selected for the current study, the study was carried out at one of the Egyptian prisons, Three tools were used for data collection, Sociodemographic and criminal data sheet and psychiatric symptoms checklist and Eyzenck's Impulsivity inventory were utilized to assess the three primary personality traits: Impulsiveness, Venturesomeness and Empathy. Results revealed that majority of the prisoners were suffering from at least one psychiatric problem, also the most common disorders were depression and somatization, the study concluded that the prison can exacerbate mental health problems, which has a long-term impact on the individual concerned and the community into which the prisoners be released, the study recommend that reception screening in prisons for mental health needs should be improved and consistently implemented.

Key words: Mental disorders • Crimes • Incarcerated

INTRODUCTION

Psychiatric morbidity generally refers to the incidence of both physical and psychological deteriorations as a result of a mental or psychological condition. The term usually applies to those who are acutely aware of their condition, despite the mental deterioration. According to the World Health Organization, morbidity itself is measured according to the number of people affected, the types of illnesses and how long the illness lasts [1].

Many psychiatric surveys have been done in prisons, but they have generally been few, have often included selected populations (such as prisoners referred to psychiatric services) and have not been systematically assessed. Indeed, three reviews included a total of only ten studies in general prison populations 2-4 more reliable estimates of the prevalence rates of serious mental disorders in prisoners, such as psychotic illnesses, major depression and antisocial personality disorder should help inform public policy and prison health services [2].

Egypt ranked as twenty one in prisoners number in all over the world (61.845 prisoners) according to eight United Nations Survey on Crime Trends and the Operation of Criminal Justice System [3]. According to WPA [4] about 66.000 prisoners all over Egypt, 80 prisoners per 100.000 of national population. Moreover, Egyptian Ministry of Interior recorded that, total prison population including pre-trial detainees/ remained prisoners (60.000) prisoners at 2012 [5].

According to WHO [6], health in prison project, clearly indicated that something must be done to improve healthcare in prison [7]. In their strategic objectives, the WHO raises issues that point toward the need for coordinated care planning in place of detention: according to the WHO, it is important to encourage cooperation and establish integrated work between public health systems, international nongovernmental organization and prison health systems to promote public health [8].

The current study was carried out to assess the incidence of psychiatric morbidity among prisoners.

MATERIALS AND METHODS

Participants: A convenience sample of 80 institutionalized criminal prisoners were drawn for conduction of the program, their age range from 20-40 years, sentences being served from one month to three years and no previous history of cognitive impairment, addictive substances, tendency to act on impulse; including lack of self-control, use force and violence as a mean to achieve goal.

The sample size calculating using the power analysis $\alpha = 0.80$ and the effect size based on the previous research study was 0.5 and analysis for research hypothesis using paired t-test, the total subject sample size will be 80 adult prisoners.

Research Design: A descriptive exploratory design was selected for the current study, such design fit the nature of the problem under investigation.

Setting: The study was carried out at one of the Egyptian prisons; the prison affiliated about 1800 prisoners, approximately 1300 criminally offended and 500 of them political prisoners, Terrorist cells Espionage.

Tools:

- Sociodemographic and criminal data sheet, it includes, age, age on admission, educational level, marital status, number of children, previous occupation, duration of sentence and frequency of admission and type of crime etc.....
- Psychiatric Symptoms Checklist-90 (SCL-90)

The psychiatric symptoms checklist-90, is a self-report instrument intended to measure severity of psychiatric symptoms intensity on nine different subscale scores: Somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, anger-hostility, phobic anxiety, psychotics and paranoid ideation. The early version developed by Mattson *et al.* [9] and last revised by Derogati *et al.* [10]. Each item of the questionnaire is rated by the patient on a five-point scale of distress from 0 (not to all) to 4 (extreme). The total symptoms distress score is obtained by summing score across items.

Eyzenck's Impulsivity Inventory: Eyzenck's Impulsiveness inventory also known as the Impulsiveness, Venturesomeness and Empathy (IVE), Eyzenck Impulsivity Inventory was designed to

measure three primary personality traits: Impulsiveness, Venturesomeness and Empathy. The scale includes 54 items categorized into three subscales of 19, 16 and 19 items (Impulsiveness, Venturesomeness and Empathy), respectively. The authors present factorial matrices obtained by principal component analysis with a direct obliminrotation, for men and women. The scale has been translated and adapted to languages other than English [11-13].

The scale items response using a Yes/No format. The items such; Do you often long for excitement (measuring impulsivity), would you enjoy water skiing (measuring Venturesomeness) and do you often long get emotionally involved with your friends problems (measuring empathy).

Procedures:

- The researcher met with the potential subjects in presence of social worker and prison warder, explains the purpose of the study, assured them about confidentiality and anonymity and finally invited them for participation. They were also informed about their rights to withdrawn from the study at any time without giving any reason and the study irrelevant to any program related to TV.
- Written and oral consent was obtained from each subject before pre-test data collection.
- *Ethical Consideration*
- Written consent was obtained from the offenders after complete description of the purpose and nature of the study. Confidentiality was assured to each offender and was informed that the data collected will be used only for research purpose; Information entered into the computer system was protected with code numbers, only the researcher has access to information in database or the code key containing personal identifiers.

RESULTS

Socio-Demographic and Criminal Data: The studied sample consisted of 80 adult prisoners aged from 20 to 45 years with a mean of 34.82 ± 6.18 . The result revealed that more than half of the studied sample (52.5%) their age ranged between 30-<40 years. (60%) of the studied sample their age on admission to the prison (30-) years, (45%, 27.5%, 27.5%) of the studied sample were technical education, read and write and highly education respectively, (47.5%) were married and (92.5%) were smoker.

Table 1: Distribution of the studied sample according criminal data (n=80)

Criminal Data		No	%
Sentence of imprisonment	1-3 years	2	2.5
	3-10 years	24	30
	More than 10 years	54	67.5
Time spent in the prison	6 months to one year	4	5
	1-3 years	76	95
Number of previous admission	Once	60	75
	Twice	16	20
	Three times or more	4	5

Table 2: Nature of crime among the among the studied sample (n=80)

Nature of the crime	No	%
Uxoricide	12	15
Revenge	6	7.5
Attempted murder	16	20
Killing in a brawl	36	45
Murder	2	2.5
Permanent disability	2	2.5
Honor killing (daughter or sister)	4	5
Arson	2	2.5

The results revealed that, slightly more than half of the studied sample (52.5%) their previous occupation were free works, (60%) of the studied sample work inside the prison, (67.5%) their relatives visits them in the prison and (82.5%) were watching T.V in the prison and only (7.5%) of them have no special habits.

As observed in table 1 that (67.5%) sentence of imprisonment more than three years, (92.5%) were smoker and (95%) of them spend in the prison from one to three years. As regard the number of previous admission, type of crime and nature of crime the study revealed that (75%, 20% and 5%) were admitted for first, twice and three times respectively. The main causes of admission as expressed by them were killing (75%) and attempted murder (25%). As regard the nature of crime, table2 shows that, (45%, 22.5%, 12.5%, 7.5%, 5%, 2.5%,2.5%, 2.5%) were killing in a brawl, attempted murder, Uxoricide, revenge, honor killing, murder, permanent disabilities and arson, respectively.

As regard the psychiatric morbidity, figure1 reveals that 92.5% of the studied sample suffering from at least one psychiatric disorder.

As regard psychiatric symptoms intensity, table 3, reveals that (82.5%, 80%, 31.2% and 20%) of the prisoners have depression, Somatization, interpersonal sensitivity, obsessive compulsive disorders respectively.

Table 3: (Psychiatric symptoms intensity) among the studied sample (n=80)

	yes		No	
	No	%	No	%
*Psychiatric symptom intensity				
Somatization	64	80	16	20
Obsessive compulsive disorder (OCD)	16	20	55	68.8
Interpersonal sensitivity	25	31.2	64	80
Depression	66	82.5	14	17.5
Anxiety	12	15	68	85
Hostility	4	5	76	95
Phobic anxiety	0	0	40	100
Paranoia	0	0	40	100
Psychosis	2	2.5	78	97.5

* Responses not mutually exclusive

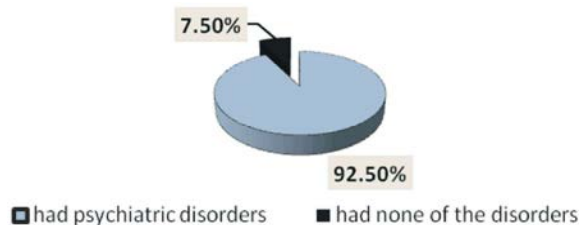


Fig 1: Frequency of psychiatric disorders among the prisoners (no=80).

The results revealed that there is no statistically significant correlation between age and psychiatric symptoms intensity. Also the mean score of impulsivity among the studied sample was (7.60±1.93, 10.50±3.062 and 11±2.219) for Venturesomeness, empathy and impulsiveness, respectively.

DISCUSSION

The sample of the current study consists of eighty prisoners aged from 20-40 years who met the criteria of selection. Results of the current study revealed that slightly more than half of the studied sample their age ranged between 30<40 and twelve percent were not working, also results revealed that 52.5% and 25% have free work and technical occupation.

In accordance with, Corapciogl & Erdogan [14] the factors which could lead prisoners to commit a crime again were established as follows: Age, gender, marital status, employment, educational background, income level prior to incarceration, type of family, residence, resisting prison staff, getting into fights with inmates and causing damage when angry. When these variables were analyzed univariately by chi-square method, unemployment, secondary school and below education,, getting into fights with inmates, resisting police officers, causing damage when angry and committing a violent crime were observed to be factors playing a role on committing a crime again.

In contrast to the current study results, Corapcioglu and Erdogan, [14] observed that being unemployed is a significant predictor of committing a crime. Ever increasing unemployment figures can lead to increasing rates of seeking illegal means to make ends meet which could in turn lead to increased criminal recidivism. DeLisi *et al.* [15] also studied the association between education and violent misconduct among 831 male inmates in Arizona. It was explained that “risk scores” were assigned to each inmate based on “different sociological variables,” but no information was provided about what these variables were and how they were measured to comprise a total score for “education”.

Despite this ambiguity, findings indicated inmates in this sample that were more educated, engaged in less violence ($\beta=.313$, $p<.01$). To make this finding more worthwhile, a better operationalization of education is necessary. Using the same sample again found inmates with less education engaged in more violence [16].

The study showed that morbidity of mental disorders was a common finding; also rates for multiple disorders were highest among the studies sample prisoners.

The results were in the same line with Mohammadi *et al.* [17]. Noorbala *et al.* [18] implied that the rate of psychiatric morbidity is around three times higher in prisoners.

In agreement, Hernandez *et al.* [19] reported that the prevalence rates for mental disorders are much higher than those usually found in the general population.

The present results revealed that majority of the studied sample suffering from depression it may be related to the prison environment marked by affective isolation, permanent surveillance, lack of intimacy, repeated frustration. Moreover, in prison, where security prevails together with restriction of movement and spaces for exercises, high control, absence of intimacy and where one is forced to live with others, also hardly to giving someone a proper place to sleep, the prisoners are slept on the floor. In addition to feeling of inadequacy, the prisoners also are anticipated suffering in life outside of incarceration, fear of family abandonment, guilt for being absent from raising and educating their children, loss of their right to the social importance of work, identity loss, stigma, social discrimination that impairs prospect for working outside of the criminal context.

According to Fazeland Danesh [2] who suggested that typically about one in seven prisoners in western countries have psychotic illnesses or major depression (disorders that might be risk factors for suicide) and about one in two male prisoners and about one in five female prisoners have antisocial personality disorders. These findings might have several implications.

Depression is one of the most common mental disorder that generally occurs as an episode or series of episodes. People suffering from this disorder may not only exhibit depressed mood but may also lose interest in life's activities and easily become lethargic. They may have difficulty concentrating or making simple decisions. They may develop ideas of hopelessness, worthlessness or helplessness. Severe depression may be accompanied by psychotic symptoms such as delusions. Persons suffering from major depression are at increased risk for suicide and may be preoccupied with thoughts of death [20].

This study showed that somatization is commonly reported among the prisoners it may be due to that the prisoner have difficulties in accepting situation, inappropriate reaction to life, in addition the prisoners face different levels of stress in the prison environment. In the same context, Mehmood *et al.* [21] showed that somatic symptom was very frequently reported among the prisoners. About (84.2%) shared that they often had headaches followed by disturbed sleep pattern, (81.6%) said that they had experienced changes in appetite and (78.9%) reported agitated behavior also.

CONCLUSION

The psychiatric morbidity among prison is substantially higher than in the general population, most prisoners have a number of psychiatric disorders such as depression, somatization and obsessive compulsive disorders.

Recommendation:

- Reception screening in prisons for mental health needs should be improved and consistently implemented.
- There should be sufficient resources in primary care teams to meet the high level of primary mental health need in prisoners.

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